Strategic Design Research Journal, 9(2): 100-111 May-August 2016
2016 Unisinos – doi: 10.4013/sdrj.2016.92.05

Democratic dialogues that make cities 'work'

Diálogos democráticos que fazem funcionar as cidades

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Abstract
The field of Strategic Design supports designers in researching and designing for the complexity of today's cities by embracing the idea of *strategic dialogue*, in which designers align with different actors and their interests. In this article, we discuss how *democratic dialogues* – foregrounded in the Participatory Design (PD) tradition – play a role in complex urban design processes (i.e. 'infrastructuring') and entail different types of dialogues of which strategic dialogue is merely one. After framing Strategic Design and PD, we describe five designer roles and their associated dialogues. This description forms the basis of an exploratory typology of democratic dialogues that was applied and exemplified in a case study about a Living Lab in the neighbourhood of Genk. The Lab attempts to design alternative futures for work in the city together with citizens, public and private organisations. We claim that engaging with this typology allows designers to understand and design infrastructuring processes in the urban context and to open up different design dialogues and roles for discussion.

Keywords: democratic dialogues, living lab, urban context, designer roles, infrastructuring.

Resumo
O campo do design estratégico apoia o trabalho de designers que pesquisam e projetam para a complexidade das cidades de hoje. De fato, ao abraçar a ideia do diálogo estratégico, os designers se alinham com diferentes atores e seus interesses. Neste artigo, discutimos como diálogos democráticos – que estão em primeiro plano na tradição do Design Participativo (PD) – são relevantes em processos complexos de design urbano (ou seja, de "infraestruturação") e implicam diferentes tipos de diálogos, entre os quais o diálogo estratégico é apenas um. Depois de enquadrar Design Estratégico e PD, descrevemos cinco papéis do designer e seus relativos diálogos. Esta descrição constitui a base de uma tipologia exploratória de diálogos democráticos que foi aplicada e exemplificada em um estudo de caso sobre um Living Lab, no bairro de Genk. O Lab tenta projetar futuros alternativos para o trabalho na cidade, juntamente com os cidadãos, organizações públicas e privadas. Afirmamos que se envolver com esta tipologia permite que os designers entendam e projetem processos de infraestruturação no contexto urbano e se abram para diferentes diálogos de design e papéis para a discussão.

Palavras-chave: diálogos democráticos, living lab, contexto urbano, papéis do designer, infraestruturação.

Introduction

Technological developments, a diverse and competitive market, globalisation, flexibilisation and privatisation change and complicate the relation between design for work, citizens and the city (Graham and Marvin, 1994). The city of Genk is one of many cities that try to keep pace with changes in terms of industry, population and societal issues like poverty and (youth) unemployment. Powered by three coalmines, Genk saw its growth in terms of industry and population rise in the first half of the 20th century. Confronted with the progressive closure of the mines (from the 1960s until the 1980s), the city attracted new (manufacturing) industries. These were mainly connected to the activities of automobile manufacturer Ford, which made the city an important economic regional player. However, by mid-2012, Ford announced a substantial reduction of its operations, eventually leading to the definitive closure of the plant at the end of 2014. This closure had an enormous impact on the city and its broader region, affecting 4000 jobs in the factory and another 4000 in related industries. This changing context backdropped the beginning of the Living Lab De Andere Markt: a space where new issues and designs around 'the future of work' evolve from bottom-up participation between diverse people and communities (Björgvinsson *et al*., 2012).

The Living Lab wants to define problems and develop relations, partners, roles and design outcomes together

with other participants. In doing so, its approach is closely related to Strategic Design in the sense that it engages in strategic dialogues with governments, private bodies and community groups to grasp and shape the changing context of the city (Meroni, 2008). Furthermore, the Living Lab's approach is strongly influenced by PD, more specifically by the approach of 'infrastructuring', as a way to address complex contexts. Since infrastructuring processes typically involve long-term, iterative and gradual processes that undergo continuous change, relational expertise (i.e. expertise in developing relationships) is an essential competence for designers (Dindler and Iversen, 2014).

To gain a deeper understanding of how this relational expertise is 'practised' in infrastructuring processes that envision alternative urban futures, we discuss how designers practise this relational expertise through 'dialogues'. Central in our argumentation is the presentation of an exploratory typology of what – in work-oriented PD – is called 'democratic dialogue'. The term democratic dialogue was originally coined to describe an approach of designing alternative futures *together* with workers (Gustavsen, 1985; Gregory, 2003; Miettinen, 2004). To discuss the diversity of democratic dialogues, we structure this paper via (i) a literature study on designer roles and dialogues, concluding with a proposal of an exploratory typology of dialogues, (ii) a field work description of a particular case study in De Andere Markt, leading to an adapted version of the typology, (iii) a discussion on dialogues and designer roles and (iv) a conclusion that summarises the typology and its value for the design process.

Framing roles and dialogues in designing for work in the city

Strategic dialogue is central to the field of Strategic Design. It is seen as a constant factor in the design process in which designers align with different actors to allow for new ways of interacting and producing value within a community and its context (Manzini and Jégou, 2003; Meroni and Sangiorgi, 2011). The designer is seen as a catalyst who is able to direct actors towards a shared future vision (Meroni, 2008). However, as design research shows, in the practice of aligning different actors, the strategic dialogue is merely one option in a broad range of democratic dialogues that designers engage in. For instance, Manzini and Rizzo (2011) stress the importance of bottom-up initiatives in Strategic Design processes.

Democratic dialogue in PD

In the research presented in this article, the concept of democratic dialogue allows us to open up the range of dialogues that designers engage in. This concept is originally foregrounded in the Scandinavian tradition of PD to design alternative futures *together* with workers. Democratic dialogue is defined by an equal level of control: everyone who is influenced by the design process can share control and direct the conversation (Gustavsen, 1985; Gregory, 2003; Miettinen, 2004). These dialogues can be verbal, but designers often materialise them via artefacts such as subjects of conversation (scenarios), tools for conversation (posters, videos) or enablers of experience (interventions, prototypes) (Hillgren *et al*., 2011; Manzini and Rizzo, 2011).

Initially, PD focused mainly on the role of democratic dialogue in engaging with workers in the development of the workplace (Ehn, 1988). Later on, as work became intensely intertwined with communities in diverse settings, PD also started to foreground settings that include – but also go beyond – the formal organisational structures common to traditional workplace studies (DiSalvo *et al.*, 2013). In the 1970s, most people were employed by large companies and institutions, and worked in monofunctional locations such as factories. Designers generally dealt with quite clear organisational structures and problem statements. Nowadays, working arrangements have become much more flexible (Graham and Marvin, 1994). The complexity of engaging with more ill-defined problem settings, organisational contexts and design processes that are more dispersed over time and space broadened the field of action of design. On the one hand, the design object extended itself from artefacts to services, systems and communities (Suri, 2003; Manzini and Vezzoli, 2003; Ehn, 2008). On the other, design engaged with the urban scale is also concerned with an increasing variety of societal areas to support better life conditions (Del Gaudio *et al*., 2014). Hence, both designers' and institutions' abilities to deal with contemporary societal challenges involve a shift in the roles they play and types of dialogues (beyond monologic or unidirectional conversations) they engage in (Manzini and Rizzo, 2011; Dindler and Iversen, 2014).

Infrastructuring

The PD concept of 'infrastructuring' provides a way to address the complexity of these roles and dialogues. It is characterised by building long-term working relations with diverse actors (Hillgren, 2013; Thorpe and Gamman, 2013; Emilson *et al*., 2014). An essential aspect of an infrastructuring process is its focus on a setting in which artefacts have a place instead of on the particular artefact itself (Pipek and Wulf, 2009). Infrastructuring processes demand designers to initiate an ongoing collective articulation of citizens' diverse and often contradictory requirements and desires in the form of dialogues (DiSalvo *et al*., 2011). Therefore, in these infrastructuring processes, the designer's role is to set up, enable and foster (physical and abstract) democratic spaces that give room to different and conflicting voices and where actions are taken to mediate these controversies or conflicts (Björgvinsson *et al*., 2012; Karasti, 2014).

Although different perspectives on infrastructuring within PD exist (e.g. IT systems for work organisation, community settings and societal information infrastructures) (Karasti, 2014), this research can be framed within community-based PD in which infrastructuring is seen as the formation of communities. According to DiSalvo *et al*. (2011), who follow Dewey's (1927) proposition that there is no such thing as one single public, infrastructuring revolves around the continuous and changing process of forming publics around these controversies. This definition indicates the significance of designers paying close attention to developing relationships.

Typical for an infrastructuring process is that it explores the rich variety of roles and dialogues that can be

situated in-between more front stage and more backstage engagements during a participatory process. While the literature of Strategic Design is more focussed on front stage relations, Dindler and Iversen (2014) address the importance of both the backstage or personal and the front stage or professional relationships for an infrastructuring process. They also stress the influence that these relationships have on the appropriation and sustainability of design artefacts. They consider relational expertise as a core competence of PD practitioners, which refers to the relational qualities in recruiting, building and sustaining relationships (Dindler and Iversen, 2014).

Similarly, Le Dantec and DiSalvo (2013) focus on capacity building and the forming of attachments as main elements for building and maintaining long-term relationships that are strong and flexible enough to allow for controversies and uncertainties (Hillgren, 2013; Thorpe and Gamman, 2011). Capacity building is thus defined as a process in which designers develop means to support participants' skills for building communities. The term attachments refers to social and material dependencies and commitments of participants and allows to think about specific ways to involve new participants or keep existing ones committed (Le Dantec and DiSalvo, 2013).

Engaging in different designer roles and democratic dialogues is thus part of the relational expertise of the designer and omnipresent in infrastructuring processes. In exploring a typology of roles and dialogues in infrastructuring processes, this type of expertise cannot be limited to a certain project phase, meaning that the backstage work is constantly mixed with front stage design activities.

Designer roles and dialogues

When we expound the democratic dialogues that take place during the long and complex engagements in infrastructuring processes and are part of the designers' relational expertise, Strategic Dialogue appears to be just one of the many forms. We placed the dialogues that were mentioned in the literature on a continuum between front stage (more strategic) dialogues and backstage dialogues. In doing so, we discovered a rich diversity of relations that are practiced via different designer roles.

Manzini (2015) differentiates between *expert* design and *diffuse* design. The first refers to design performed by expert designers, who have been 'trained' and play a prominent role in the design process. The latter refers to design performed by people in their everyday life, in which the designer takes on a more marginal role. When we look at how a diversity of authors have addressed this continuum between expert and diffuse designer roles, we see different roles emerge: catalyst (Meroni and Sangiorgi, 2011), facilitator or 'match-maker' (Björgvinsson *et al*., 2010), trigger of 'publics' (DiSalvo, 2009; Manzini and Rizzo, 2011), co-designer (Sanders and Stappers, 2008) and design activist (Lenskjold *et al*., 2015).

Similarly, the different types of democratic dialogues that designers – in these different roles – engage in today can be situated somewhere on the border between expert and diffuse design (Manzini, 2015). Valuable work has been done in the past to explore the different designer roles and associated dialogues (e.g. Lee, 2008; Sanders and Stappers, 2008; Manzini and Rizzo, 2011; Raijmakers *et al*., 2012). We combined, refined and applied some of those insights to come to an exploratory typology of democratic dialogues in relation to different designer roles in infrastructuring processes. This typology consists of (i) Strategic Dialogues, (ii) Agonistic Dialogues, (iii) Committing Dialogues, (iv) Expressing Dialogues and (v) Questioning Dialogues. We will discuss these forms of democratic dialogue in more detail.

Strategic Dialogues

As mentioned above, the idea of Strategic Dialogue is mainly used in the field of Strategic Design in which the designer's role is to strategically face and promote changes in people's way of living in today's complex society (Manzini and Jégou, 2003; Meroni and Sangiorgi, 2011). The role of the catalyst in Strategic Design can be situated in the expert sphere. Its role is to – democratically – align with different actors to allow for alternative exchanges and value production within a community and its context.

Committing Dialogues

While Strategic Dialogues refer to front stage alignments between actors in a design process, Committing Dialogues address the backstage relations. In this context, the designer plays the role of a trigger of publics. This means that the designer plays the more diffuse role of discovering or surfacing the existing publics that exist around a certain issue (e.g. city gardening) or creates new ones. This role has been described in contemporary literature on PD, Design for Social Innovation and Strategic Design (Le Dantec and DiSalvo, 2013; Manzini, 2014). For instance, Le Dantec and DiSalvo (2013) have discussed the role of designers in sustaining and generating 'attachments' to form publics. As mentioned earlier, this focus on identifying and forming attachments relates to Dewey's (1927) definition of publics as dynamic constellations that assemble around a shared issue. Attachments thus refer to 'dependency on' and 'commitment to' that occur (e.g. maintaining a community garden) and become transparent as publics forms. In the formation of publics through design, Committing Dialogues can disclose and sustain existing attachments as well as generate new ones (e.g. by initiating a new system of negotiating space between community gardens, so that people can keep on gardening in a more coordinated manner). What this disclosure and creation of commitments (or attachments) shares with Strategic Dialogues is the interest in the constant articulation of the relationships that exist and develop within complex design processes.

Questioning Dialogues

While Strategic and Committing Dialogues are more focussed on designers visualising and creating relations, Questioning Dialogues involve designers who actively question how these relations contribute to addressing the design issue at stake. Here, the designer takes on the role of the activist who is engaged with initiating change to imagine and create 'better futures' by entering into relational networks (Thorpe, 2008; Fuad-Luke, 2009; Walk-

er and Giard, 2013). Design activism is characterised by an underlying cause for action (Julier, 2011) and can be considered as "a disruptive aesthetic practice" (Markussen, 2011, p. 3), creating dissensus, which unbalances the status quo. Artefacts play a central role in design activism (Martilla, 2011), such as protest artefacts (suggesting ideas for changing the status quo), demonstration artefacts (providing alternatives to the status quo), service artefacts (for humanitarian goals) and entrepreneurial artefacts (challenging the status quo of the marketplace) (Fuad-Luke, 2009). Via Questioning Dialogues, the status quo is thus revealed and contested while creating dissensus (DiSalvo, 2010). Many definitions of design activism place the designer in an antagonistic position to (public) institutions. However, in PD and infrastructuring contexts, a 'minor' design activism (Lenskjold *et al*., 2015) takes form, in which the design activist acts from within or in relation to hegemonic public institutions. The Questioning Dialogue allows the designer to think and act collectively 'from within' and 'in relation to', which stands in contrast with more traditional approaches of design activism.

Agonistic Dialogues

In the Questioning Dialogues during infrastructuring processes, many design questions develop over time, in different material forms, scenarios, performances etc., in collaboration with different 'publics'. Confronting these alternative – and sometimes conflicting – questions that develop during the design process, without immediately working towards solutions, requires specific relational expertise. This expertise is embodied by the designer role of the match-maker. The designer as match-maker does not just bring people together to agree, but promotes dialogues that give room to doubts, conflicts and disagreement. Through this, the power and dominance present within participatory processes is visualised (Sjöberg, 1996; Gregory, 2003). The match-maker thus enables types of democratic dialogue that 'match' a polyphony of voices and opposing views among different groups of adversaries who constructively debate matters of concern (Latour, 2005). This is closely related to Mouffe's (2005) definition of an agonistic democracy, which is based on a constant confrontation of hegemonies, represented by a multitude of voices and disputes among heterogeneous groups. Mouffe stresses the need for artistic interventions in society to build an agonistic democracy: "[w]hat is needed is a widening of the field of artistic intervention by intervening directly in a multiplicity of social spaces in order to oppose the program of total social mobilization of capitalism" (Mouffe, 2007, p. 1). Hence, a challenge for the match-maker is setting up Agonistic Dialogues that do not support rational decision-making processes aiming for consensus. These dialogues transform antagonism into agonism by making the alternative voices, contradictory agendas and agencies of actors explicit (Mouffe, 2000; Boelen *et al*., 2015).

Expressing Dialogues

At a certain stage in a participatory process, designers gather different participants and their different voices in a process of collective creativity. In this context, the designer steps into the role of the co-designer who engages in co-design practices that involve citizens and foster a dialogue among – for instance – local forces, resources and urban governance mechanisms (Rizzo *et al*., 2015). Co-design refers to collective creativity as it is applied across the whole span of a design process and in which roles between designers, researchers and participants get mixed up. Co-design can occur both in expert and diffuse design. The first refers to the collective creativity of designers collaborating, while the latter entails the creativity of designers and people not trained in design working together in the design development process (Manzini, 2015). The co-designer engages in dialogues that support the participant or 'expert by his/her experience' by providing tools for ideation and expression (Sanders and Stappers, 2008). Luck (2003) has explicated several aspects that need to be taken into account in these Expressing Dialogues, such as being cautious about generalisations, the potential to reveal tacit knowledge via descriptive narratives and metaphors, the limiting quality of designers and participants talking about solutions and the lack of language possibilities when engaging with discipline-specific knowledge.

This theoretical overview of the different dialogues associated to designer roles has generated a first exploratory typology that we used to analyse our case study. As visualised in the overview (Figure 1), the strategic role of the designer (i.e. the designer as catalyst engaging in Strategic Dialogues) is complemented by other democratic dialogues that are all linked to a specific designer role. These roles were described as the designer as catalyst who engages in Strategic Dialogues, the designer as trigger of publics who engages in Committing Dialogues, the designer activist who initiates Questioning Dialogues, the designer as match-maker initiating Agonistic Dialogues and the co-designer who takes on Expressing Dialogues.

Fieldwork in the case of De Andere Markt

In the same year that Ford announced its closure (2012), Fablab Genk was set up as an open and alternative space for research, experiment and work where people can encounter new work practices, tools, processes, know-how, etc. (Gershenfeld, 2005) to develop a prototype of almost any imaginable product (Milanese, 2006). In exchange, the Fablab users are expected to share their designs with others in accordance with the principles of 'open source' (Bauwens, 2007). From the beginning, Fablab Genk aimed to be more than just a physical infrastructure. The lab wants to involve local inhabitants as partners in a long-term participation process, resulting in open objects, systems and services in various societal domains (De Weyer *et al*., 2013). In 2014, we initiated the Living Lab De Andere Markt as an attempt to move certain elements of the Fablab's working practices and tools into the neighbourhoods of the city.

Traces of Coal at De Andere Markt

De Andere Markt is represented through a shopfront in the neighbourhood of Winterslag. This physical location is complemented with a printing press mounted on a

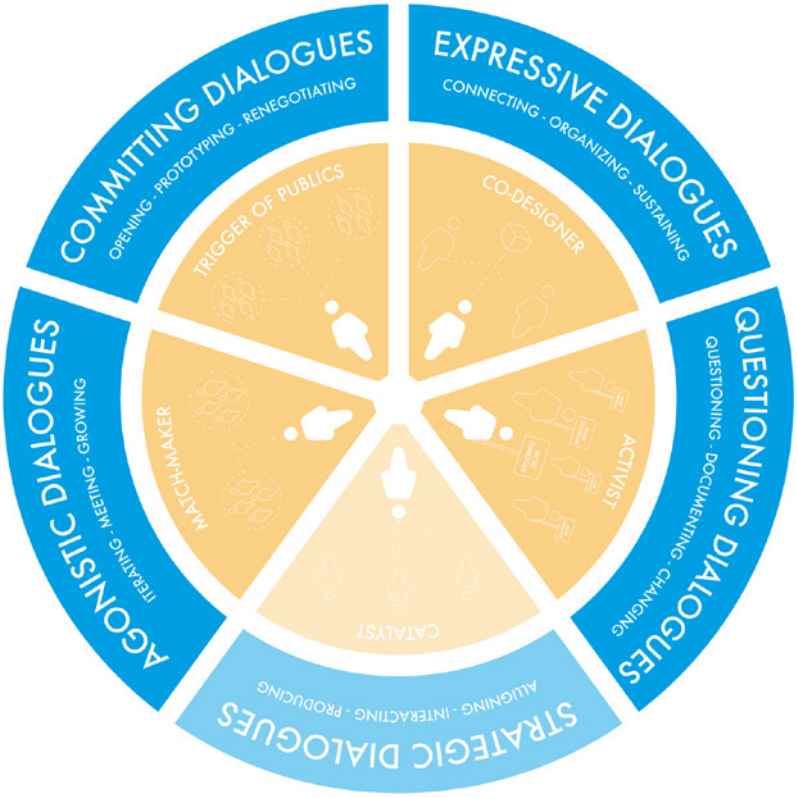

Figure 1. Overview of designer roles and dialogues.

cargo bike, which we use for visiting different neighbourhoods. De Andere Markt is set up as a public space which people and organisations can enter freely. Designers and local actors can use the space to engage in democratic dialogues (e.g. by making use of Fablab's infrastructure) with citizens and other public and private actors to rethink the future of work. Many design (research) initiatives are developing in the context of De Andere Markt, such as Studio Refugee, a small initiative by a young product designer who researches how to design together with refugees to change their position in society. The initiative we will discuss here is called 'Traces of Coal' (Kolenspoor), a project in which the city and the national government develop new plans for an old coal track. The Living Lab's role is to document and connect smaller work initiatives alongside this track (e.g. urban farms) and design alternative futures for the coal track in the form of locally embedded and sustainable workspaces.

At the start of the Traces of Coal project, we engaged in dialogues with the community and policy makers to collaboratively define which issues are at stake concerning the coal track. As many spatial studies had been carried out in the past, one of our tasks was to inventory and align our design scenarios with these previous studies. This trajectory of inventorying and aligning was structured by monthly work meetings with a steering group in the city hall. This steering group of 14 people, assessing and supporting our progress, was composed of all project partners (research groups, architects and policymakers of the city and regional government) and further complemented by experts in participation and city planning, appointed by the government.

Simultaneously, we started engaging in quite open dialogues with different publics alongside the coal track, by walking on and mapping the track. All conversations with participants were focussed on expressing their specific skills and how they related to the specific space of the coal track. To initiate these conversations, we applied an interventionist approach in which we entered public space with a cargo bike mounted with a DIY printing press and asked people to visualise their skills via a poster (i.e. skill-poster) made with the cargo bike's printing press. This allowed us to engage in dialogues that were not goal-oriented (i.e. immediately linked to the redesign of the coal track) with people developing initiatives alongside the track. The conversations were photographed, recorded and transcribed. They were analysed by categorising the different conversations and corresponding pictures (according to type of skills, initiatives, relation to the track, location on the track, etc.) and mapping them on a visual representation of the coal track. The resulting visual representation showed a wide range of interesting but (often) very informal initiatives that are organised in different spatial zones (shown in Figure 2) with dedicated purposes such as (1) a zone of 68 kitchen gardens, (2) an industry zone, (3) a zone of urban farms and meadows, (4) a zone of football fields and canteens, (5) a zone dedicated to the production and transport of goods (e.g. furniture) by small and medium-sized industries, and (6) a zone of backyards often repurposed (e.g. to ateliers) for repairing cars and motorcycles.

As the above-mentioned dialogues had great potential for changing the debate on the future of work in the city, the skill-posters and corresponding conversations

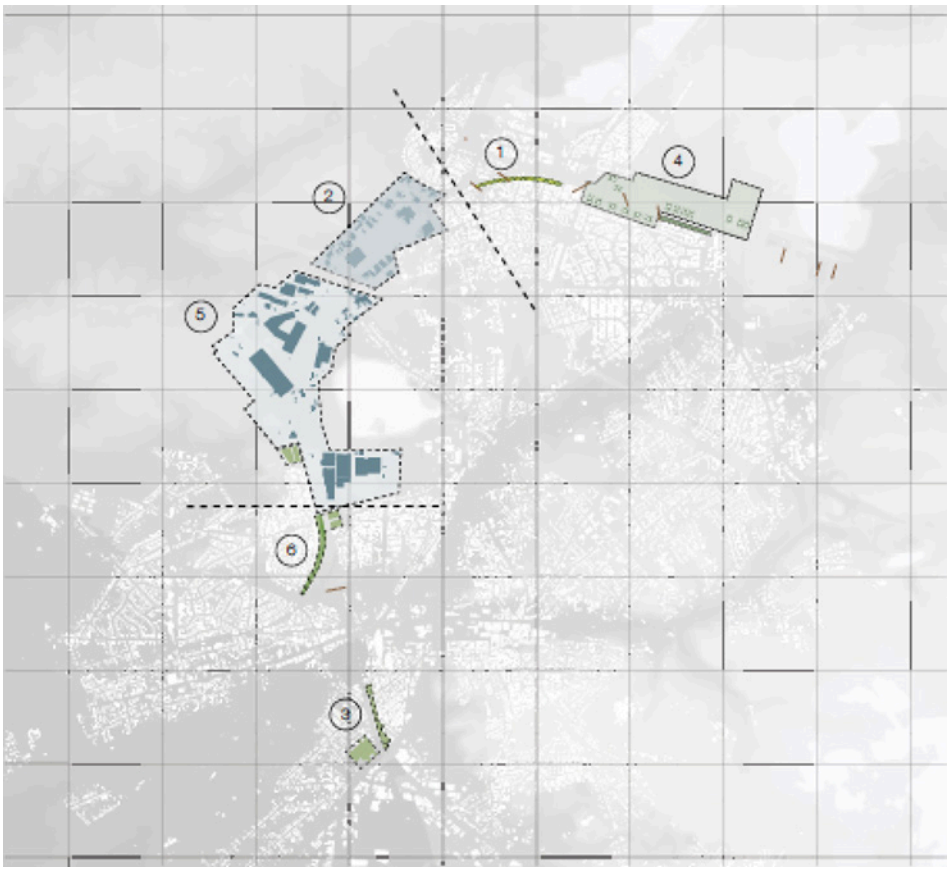

Figure 2. Coal track with the different spatial zones.

were publicly documented as design questions in the shopfront of De Andere Markt, in people's own workspaces and online (on the blog and social media) through videos, podcasts and pictures. In this way, the collected data could do more than merely inform the design research trajectory; they also functioned as tactical conversation starters for debates with policymakers and private actors, challenging the status quo of work in the city. For instance, many of the observed urban farming initiatives were – often unofficially – created by migrant families who arrived in Genk in the booming period of the mines and had been part of the informal landscape for years, thus being part of the history of the city. The public documentation triggered renegotiations between designers, policymakers and farmers on the contested role of these urban farms in the city. Besides the designers actively publishing all documentation in the shopfront and on social networking sites, we also encouraged participants to take up a similarly activist role by putting up the skill-poster in their own work or living spaces (e.g. office space, shop, living room, etc.). In this way they create visual cues of their skills alongside the track and throughout the city (Figure 3).

In order to use the documented Questioning Dialogues as fruitful ground for sustainable projects or actions, we took on the role of match-makers, stimulating Agonistic Dialogues while aiming to establish relationships of trust. First, the permanent shopfront of De Andere Markt with regular opening hours gives the citizens of Genk the chance to drop by at any time and get acquainted with past dialogues. In the shopfront, the different documented Questioning Dialogues (skill-posters and documented stories) were literally confronted with each other on the walls, visualising different initiatives, people and organisations with – sometimes – contradictory agendas. For instance, because we visually confronted the stories of different types of farming and gardening initiatives with each other on the walls of the shop, the visitors (not necessarily involved in the Traces of Coal project) could participate in the reflection on the role of food production in that area and for the city. We call these confrontations Agonistic Dialogues. These dialogues allow us to match initiatives or actors with each other in-between formal meetings or workshops and enhance their mutual relations and their reflection on the issue of the coal track. This slow growth of relationships, combined with the stories collected in the field, contributed to generating scenarios for several pilot cases for the future of work in relation to the coal track.

Through the development of these pilot cases, we wanted to document and connect the smaller work initiatives alongside this track (e.g. urban farms) with each other and with larger private or public initiatives, in order to design sustainable future workspaces. Concretely, this approach took on the form of – among other things – four co-design workshops for which actors were strategically invited to engage with each other via Expressing Dialogues. In the workshops, this dialogue was supported by a big carpet (manufactured by the design research team in collaboration with Studio Refugee) on which the coal track is visualised. Using pieces of cloth, the participants designed work initiatives along the coal track and con-

Figure 3. Skill-poster of Fatima: "point of contact", photograph by Boumediene Belbachir.

nected their expertise. In doing so they rethought how the coal track, as an axis of mobility and energy throughout the landscape, could contribute to thinking about an alternative future for the urban farms in the city landscape. The outcomes of the workshops were not intended to be design 'results' but design dialogues, allowing the further formation of commitments between local actors on urban farming. This provisional character has regularly generated confusion among policymakers in the Traces of Coal project, who want to see every step as a clear progressive result towards an innovative and self-sustaining plan for the coal track.

Five types of democratic dialogues

The literature study described the dialogues (and associated roles) designers engage in today when designing cities in democratic ways. In the case study, these dialogues and roles came to life when democratically designing alternative futures for work in practice. The different dialogues and designer roles that took form during the infrastructuring process were documented through 'thick descriptions' (Geertz, 1973) using different data (drawings, videos, narratives, pictures, reports, posts on social networking sites, field observations, interviews and maps). The De Andere Markt researchers independently conducted qualitative analyses of the process documentation by carrying out an open coding of the data to look for patterns. These analyses were regularly bundled to conduct a more selective coding using the above-mentioned theoretical typology of dialogues and (associated) designer roles in the infrastructuring process. The following dialogues and matching roles for designers in democratically giving form to alternative futures for work in the city were identified (Figure 4).

(i) The *designer as catalyst* engages in *Strategic Dialogues* with public, private and citizen-driven bodies to democratically give form to the design brief, the process and the outcomes. Although these dialogues aim to be democratic in nature, they resemble expert conversations since other actors (e.g. policymakers, public or private institutions and companies) expect this professional attitude from a designer who deals with urban development. The designer thus has a prominent role in the design process. At the start of the Traces of Coal project, as well as during the monthly progress meetings, Strategic Dialogues took place. In these meetings, gathering policymakers and community members, the different steps for dealing with the future of the coal track were discussed and shared.

(ii) The *designer as trigger of publics* engages in *Committing Dialogues*. In the literature study, we observed a close link between the idea of Strategic Dialogue and the designer's role as trigger of publics, because they are both focused on building relations. However, the engagements in the field demonstrated that the designer as trigger of publics acts explicitly less professionally. Rather, the dialogues initiated via the cargo bike have a backstage character as they take place as openly as possible and act as 'prototypes' of relationships between diverse stakeholders, changing over time. Resulting in an organic inventory and creation of attachments, the interventions were considered a first means to get to know the people, organisations and informal initiatives operating alongside the track. While intervening, we thus simultaneously formed commitments. When we got acquainted with local farms and their attachment to specific spatial zones and cultural contexts (e.g. a Muslim community interested in *halal* meat), our dialogues with these farmers spontaneously explored their relationships with the landscape surrounding the coal track and local food distributors. In the process the existing attachments were thus already slightly changing. Regularly, these Committing Dialogues provoked uncertainties and renegotia-

Figure 4. Overview of roles and dialogues in De Andere Markt.

tions between citizens who are used to being anonymous, policymakers who have to adapt to less goal-oriented ways of working and designers who often work behind closed doors (Huybrechts, 2014). For instance, at the start of De Andere Markt, policymakers were continuously asking about the tangible outcomes of the interventions. It was only after a few weeks, when these interventions resulted in small pilot cases, that policy makers started to feel more confident about the value of these dialogues.

(iii) To tackle the potential volatility of the above-mentioned open dialogues, the De Andere Markt team adopts the *activist role and uses Questioning Dialogues to more fundamentally challenge the status quo discourse* (DiSalvo, 2010) on the future of work in the city. Analysis of the fieldwork showed that this role does not correspond with the romantic idea of the designer operating as an opponent of policy who intervenes and disrupts the current state of affairs. However, referring to the idea of minor design activism (Lenskjold *et al*., 2015), the design activist in the Traces of Coal project collaborates thoroughly, slowly and closely with the city and other institutions and operates from within existing power relations. A crucial way in which the Questioning Dialogues of the design activist took form is by publicly, yet carefully disclosing documentation of attachments and, in that sense, revealing and changing these relations via social media, in the city space (people's workspaces) and in the shopfront.

(iv) The *designer as match-maker engages in Agonistic Dialogues*, which are characterised the confrontations of different types of documentation generated via Questioning Dialogues without working towards solutions. The different types of documentation of *iterative* interventions alongside the coal track and within the city neighbourhoods are brought together in-between formal meetings or workshops. Although the dialogues are agonistic in nature (allowing for conflicting viewpoints on the future of work), taking part in them enhances the level of trust among the citizens, policymakers and local organisations, since they get to know each other, their intentions and the bigger framework of the project. By functioning as an informal meeting place for citizens, as an incubator for initiatives to grow and as a physical connection with other initiatives dealing with urban development, the permanent shopfront of the lab is the main venue where these agonistic dialogues take place. Historical data on work in the city, the dialogues generated during the interventions and

the analysis of these dialogues are documented and published in different types of 'collages' in the shopfront, on the streets and online in order to question and change the existing dialogue on work. The designer as activist actively seeks dialogues between the conflicting viewpoints related to the future of work and publicly documents them through the data resulting from the process. Thus, this dialogue does not specifically focus on the end result (e.g. a possible spatial solution alongside the track). Rather, it reveals the different conflicting viewpoints that surface during informal conversations and professional research activities (e.g. data mining), thus mixing backstage work with front stage design activities (Dindler and Iversen, 2014).

(v) The *co-designer engages in Expressing Dialogues*, connecting the actors participating in our different dialogues with actors from private or policy spheres. The fieldwork showed that this designer role was quite strategic, since it envisions the connection between the different actors related to the issue of the coal track. The designer in this case did not necessarily take on the expert role but rather invited 'experts by experience' to participate in the different workshops. One of the main tasks of the co-designer is to provide participants with tools for ideation and expression. In the interventions with the cargo bike, the DIY printing press is seen as such a tool, inviting passers-by to use the press and visualise their skills in a poster. Another example of a tool is the large carpet used in the two co-design sessions, enabling the participants to physically document and connect smaller work initiatives alongside the track and move on to designs of future workspaces. Furthermore, the documentation that resulted from the different research activities functioned as an always-available tool for the participants to use within the workshops and in more informal sessions taking place on the street and in the shopfront.

Discussing democratic dialogues in infrastructuring processes

This article aims at setting up an exploratory typology of democratic dialogues and the associated designer roles in infrastructuring processes. The added value of this typology is its attempt to inventory the existing democratic dialogues in which designers engage when they are involved in complex design processes in cities. Furthermore, this inventory allows us to reflect on our practice in a live case study. In this discussion, the inventory allows us to revisit the concept of democratic dialogues in work-oriented PD and reflect on it in the context of contemporary relations between citizens, work and city-making and the approach of infrastructuring. It aims to demonstrate that – next to the problem statements, spaces and participants – the designers' own roles and ways of engaging have become increasingly diffuse. The designer's role is neither limited to that of a design activist nor to that of a catalyst. She/he assumes different roles that often overlap, and, as such, she/he is involved in different dialogues depending on many factors. Hence, infrastructuring involves a continuous redefinition of the designer's own role in the design and relational process. It also elucidates the specificity of the PD designer, whose role is to initiate an ongoing collective articulation of diverse and often contradictory requirements and desires in the form of dialogues (DiSalvo *et al*., 2011). As mentioned, in infrastructuring processes, she/he sets up, enables and fosters democratic spaces that give room to these different and conflicting voices and where actions are taken to mediate these controversies or conflicts (Björgvinsson *et al*., 2012; Karasti, 2014).

A challenge that (the creation of) this typology poses is that it can – mistakenly – be understood as the final outcome of analysing the discussed infrastructuring processes. However, we never intended the typology to be a 'result'. Just like the practices we describe, this exploratory typology is an intervention in itself aiming to get a grip on the 'attachments' contemporary design develops when engaging with the city context and/or work-oriented PD (e.g. its positioning of activist as a fixed category). It simultaneously redirects these attachments to design alternative futures for design and city-making and – in this case – for designing work in an urban context. More specifically, the typology feeds the discussion on: (i) the temporalities and political nature of dialogues and designer roles, (ii) their value as orientation points for designers who are engaged in city-making and (iii) the value of opening up different designer roles.

First, the exploratory typology of democratic dialogues foregrounds the political nature and temporalities of these dialogues and associated designer roles. We cannot fully understand dialogues and designer roles without taking into account how they evolve throughout the design process and how they complement and conflict with each other. This became clear in the sometimes conflicting expectations between designers, citizens and policymakers. De Andere Markt initiated many Questioning Dialogues in which the design artefacts (e.g. public documentation of small farming initiatives) played an intermediary role. These 'in-between' design artefacts sometimes conflicted with policymakers' expectations to present tangible design artefacts as results (e.g. concrete design proposals for self-sustainable city farms) in Strategic Dialogues. However, it also became explicit that iterative Agonistic Dialogues (by visually confronting different positions and stories on the issue at stake) clarify the complementarity between the diverse dialogues for all participants involved. Thus, awareness of the productive conflicts between the different types of dialogues over time supports designers and participants in designing alternative futures for our cities.

Second, awareness of the different manifestations of democratic dialogues in an infrastructuring process also offers designers and participants reassuring orientation points when engaging in participatory city-making. The case study showed that, at the start of the design process, the dialogues were focused on developing relations situated more at the extremes of a continuum: very strategic (e.g. positioning the design process on the city's policy agenda) and very open (e.g. engaging dialogues in the form of open

interventions). These types of dialogues refer to what Dindler and Iversen (2014) have called front stage and backstage work. Over time, different – more in-between – types of democratic dialogues slowly developed in the infrastructuring process. It is crucial to remain aware and take care of the more extreme sides of the spectrum. After all, there is always a need for being conscious of what is agreed upon and expected in Strategic Dialogues (e.g. engagements for achieving certain results). However, the more open Committing Dialogues also force the strategy to develop slowly and carefully enough to sustain existing attachments or develop new ones that build and nurture relationships with local actors. Taking into account these extremes supports designers and participants in engaging more consciously and productively in the whole spectrum of dialogues.

Third, this typology of dialogues opens the different roles up for discussion, which proves to be extremely valuable in the transfer of knowledge and practices (e.g. case studies, methods, tools, etc.) between designers and people involved in different domains in city-making. For instance, by using the typology, we were able to discuss the advantages of moments at which the design activist role overlaps with the co-designer role (Lenskjold *et al.*, 2015). In the case study, the speculative public documentation on informal work activities in the city that challenge the status quo perceptions of the future of work could be actively used in the co-design workshops to trigger the imagination of the participants. Furthermore, the case made clear that the political motivation for change is not solely linked to the role of the design activist but is also embedded in the Strategic Dialogues. Engaging with dialogues and designer roles thus enables us to nuance and innovate our ways of understanding the ways in which we design cities, such as 'top-down' (Carvalho, 2015; Kitchin, 2014) versus 'democratic' or in the role of 'activist' versus 'co-designer'.

Conclusion

Nowadays, more and more design researchers are involved in addressing the complexity of the urban realm via infrastructuring processes. In the field of Strategic Design, the designer's role is to strategically face and promote changes in ways of living in today's complex society and to be a catalyst, steering actors towards a shared future vision (Manzini and Jégou, 2003; Meroni and Sangiorgi, 2011; Meroni, 2008). The literature foregrounds Strategic Dialogue as a way of doing so. Being aware of the complexity of dialogues involved in infrastructuring processes in urban contexts today, we tried to come to an exploratory typology. This typology entails more forms of democratic dialogues – a term used in PD – than merely the strategic one and supports the practice of aligning different actors. By exploring different types of dialogues in relation to different designer roles through literature and fieldwork in De Andere Markt, we formulated a typology consisting of: (i) Strategic Dialogues, (ii) Committing Dialogues, (iii) Questioning Dialogues, (iv) Agonistic Dialogues and (v) Expressing Dialogues.

As the discussion of the Traces of Coal project illustrates, all these types of dialogues – and corresponding designer roles – have a place and time in the infrastructuring process. Although the literature shows (e.g. Dindler and Iversen, 2014) that some similarities can be found between processes on the level of *how* and *when* these dialogues and roles manifest themselves, the case shows this is also highly dependent on the process in question. Therefore, we believe that the typology we propose in this article is not a 'final outcome' or 'result'. Rather, it functions as a possible starting point for designers to become aware of and explicate the different types of dialogue and designer roles as well as their implications in the context of a specific infrastructuring process.

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Submitted on January 31, 2016
Accepted on March 30, 2016